

## ABSTRACT

In order to attain an object to provide a reaction vessel, reaction apparatus, and method with which a reaction can be automated without requiring centrifugation when a reaction solution is held in a reaction chamber, the temperature of the reaction solution held in the reaction chamber can be rapidly controlled, the reaction can proceed even when just a tiny amount of reaction solution is held in the reaction chamber, and the reaction occurring in the reaction chamber can be monitored in real time, temperature control of a reaction solution 4a held in a tightly closed space S1a is performed through a bottom plate 22a constituting a reaction vessel main body 2a and a pressing part 32a constituting a cover member 3a, and the irradiation of the reaction solution 4a with excitation light and the detection of fluorescent light emitted from the reaction solution 4a are performed through a first side plate 23a constituting the reaction vessel main body 2a.